

Co-op Coalition Survey: Hot Water Temperatures

Thanks to the members who responded (below). Thanks for helping out one another!

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How does your co-op maintain a consistent hot water temperature to all of your units? This is an important question that will affect everyone, but especially larger buildings. Please take a few minutes to help out another Coalition member and "Reply" by Friday, June 21.

NOTE: Because of vacation schedules, the shared final results may take a bit longer to get out to everyone.

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We provide hot water to our coop residents at a temperature of 130 degrees. The U. S. Department of Energy suggests that owners of single-family dwellings set their water heaters at 120 degrees in order to conserve energy. However, we do not know how well that translates for a multi-resident building. We would like to hear from other coops regarding the temperature setting for their hot water systems. Have temperature reductions been successful or are there problems we should watch for?

<25 units	We have a continuously recirculating hot water system in our building of 20 units. This type system maintains a uniform temperature to all units. Our temperature setting is 120 degrees Fahrenheit.
25 – 49 units	We are a small building. We have not had any complaints from residents about the consistency of our hot water temperature. When the hot water heater goes out (due to a power outage, etc.) and needs to heat up, it takes longer for some units to receive hot water but when the heater is working properly, the temperature does not seem to be a problem.
25 – 49 units	32 unit, 5 floor building with one apartment in the basement. We currently set our water heater at 129. However, even coming from the storage tank, it's usually around 120-125 at that point. We have one water heater, plus an extra tank for hot water storage. In general, only the couple of apartments very far from the heater on the 5th floor on the opposite side of the building ever have hot water problems.
25 – 49 units	We have two 150 gallon gas fired water heaters with an expansion tank plus a large circulating pump. This circulating pump keeps hot water consistently throughout the system (even the 8 th floor) at all times. It eliminates the need to run your hot water for a minute or two to get hot water, saves water and time.
25 – 49 units	We reply on a pressure-regulating pump to maintain consistent pressure throughout the building, and those on the 7th floor have essentially the same pressure as those on the 1st floor. The hot water temperature does vary slightly throughout the building, depending upon the distance it has to travel from the two high-recovery tanks in the basement, but because of the consistent pressure, the variance in temperature is minimal, and the 7th floor as well as the apartments at the greatest distance from the tanks have no issues with hot water.
Management company response and their experiences	Some general feedback on hot water temps that we have run into when address temp issues, including lowering the temp at communities:

<p>with small buildings (30 – 59 units)</p>	<ul style="list-style-type: none"> • The types of fixtures can impact the temp of hot water in any given system. We had a community (59 units) spend thousands in plumbing + engineering reports to determine that the cause of hot water issues were directly related to single lever faucets and failing cartridges that introduced cold water into the hot water stream, so even though water coming out of the hot water heater and storage tank was 130 degrees, it was not that in unit. • Mixing valve maintenance is important to making sure the water temps are maintained through the closed system. (30 units) • Installing circulator pump on older system to keep hot water constantly available addressed temp discrepancies in various units (30 units) • All of our communities are set at 125 degrees and generally are able to keep that temp with modifications (mixing valve, storage tank, circulator pump, etc.) <p>We strongly encourage using a third party engineering firm to determine the impact of lowering temps, esp. if there is concern about actuals at this point (e.g. if tank is at 130 but unit furthest away from the heater is coming out at 100, there might be other steps that can be taken to keep actual closer to tank temp, so decreasing the temp will be negligible to end user but Coop can see benefits in lower energy costs).</p>
<p>50 – 74 units</p>	<p>We set ours at 140 degrees per the recommendation of our energy consultant, Commons Energy, who also encouraged us to install a high-efficiency boiler. The hot water heater is relatively small actually, but the hot water system carries the water through so many pipes throughout the building that in effect we have a lot of hot water available to all members at all times. One thing we've done to save money is insulate the pipes to the extent possible. Also, some members may complain about not having enough hot water in their shower, say - but we've found that those complaints are caused by calcification in the hot water valve in their shower control unit rather than a problem in the building at large.</p> <p>If you're interested, here's what we installed in 2016 for the hot water heater: New State Hi Eff. SUF119 500 NEA ASME Nat Gas Commercial water heater 499,900 Btu; 95% efficient...</p> <p>We installed a new water heater in January or February of 2016. This tank is not much bigger than you would find in a single-family home. Hot water is provided to the units quickly and at a consistent temperature by continually circulating the hot water throughout the building, whether it is being used or not. Thus, the entire building's hot water pipes add substantially to the storage of hot water and make it available almost instantly when an individual tap is turned on.</p> <p>Until recently, the tank temperature was set to 140 degrees. Recently, as a result of a defective release valve and deteriorated burner, the tank temperature was reduced to 135 degrees. Now that repairs have been made, the tank temperature has been set at 140 degrees. However, during the summer, when make up water will be warmer, it might be possible to reduce the set temperature without affecting people's ability to obtain sufficient hot water.</p>
<p>50 – 74 units</p>	<p>Our temperature is set at 120 degrees, which is a comfortable setting for our members. The temperature is controlled by each hot water heater, as opposed to the building automation system. The temperature will fluctuate a couple degrees, but never any higher than 125 degrees.</p>
<p>50 – 74 units</p>	<p>We are a building of 62 units that is more than 100 years old. We have been struggling over the past two years to regulate our hot water so that it is even over all units. It seems that every time a plumber needs to shut down water to make a repair in a tier, the balance shifts. A recent attempt to make an overall fix has not proven totally successful.</p>

50 – 74 units	We placed water heating circulation pumps at the beginning of each tier.
75- 149 units	No responses in this category
150 – 174 units	All our domestic water heaters are set at 130F. Our hot water systems have a pump that pushes the hot water to the top floor and then down to the first floor. This helps to maintain a constant hot supply.